

Boehlert Seeks Stronger Voice for Science on Capitol Hill

Congressman Sherwood Boehlert had only four minutes to make it to the floor of the House of Representatives for a vote, and the exclusive “members only” elevator in the Rayburn House Office Building wasn’t cooperating. As the New York Republican repeatedly pushed the down button with no result, the doors on a nearby “public” elevator opened and people crowded in.

At the last second, the congressman jumped into the public elevator, which was filled with people who had just been at the first hearing of the full House Science Committee under Boehlert’s command. “That was a good hearing, even with the interesting ending,” Boehlert said, half as a statement, half as a question.

The hearing, the first of three full hearings called by Boehlert early in the congressional session in an effort to make the science committee more visible, had been a matter-of-fact discussion of the potential of alternative energy sources such as wind, solar, and biomass. Boehlert was bringing the hearing to a routine end when a conservative congressman who had missed the entire two hours of expert testimony rushed in and angrily attacked the witnesses for factoring the “theory of global warming” into their long-term energy projections. Boehlert listened patiently to the five-minute tirade, then brought down his gavel, said “thank you,” and ran for the elevator. “Next week the hearing is on science education,” Boehlert told the elevator gathering. “That’s when the teachers are in town. Imagine, we’re going to have actual teachers testify about education.”

Boehlert, a member of the House Science Committee since 1983, was elected as the committee chairman on 4 January. In his new position, Boehlert has jurisdiction over research and development programs at NASA, NSF, the Department of Energy, and the Environmental Protection Agency. In his first few months on the job, Boehlert has emphasized energy, education, and the environment as his priorities for the committee, but he also told members of the Universities Research Association, “I will fight to increase research funding in general, and funding for the physical sciences in particular. Unique and vital DOE facilities, like Fermilab, must continue to prosper, even as we participate in

The new House Science Committee chairman is a moderate Republican who is focusing on renewable energy, science education, and environmental issues.

international projects like the Large Hadron Collider [LHC].”

In an interview with PHYSICS TODAY before the release of President Bush’s budget blueprint (see the story on page 29), Boehlert offered his views of science and how he hopes to shape the committee’s support for R&D spending.



SHERWOOD BOEHLERT

PT In a recent speech, you said that the science policy debate “sometimes seems composed entirely of randomly generated numbers” and said that scientists should be ready to justify with data the push to double the federal civilian science budget over several years. Do you have a problem with the goal of doubling federal science spending?

BOEHLERT Well, I mean, it’s a magic figure just pulled out of the sky because it sells well. There is no doubt in my mind that we have to significantly increase our investment in science. I don’t have a magic figure, but I’m committed to the proposition that it has to be a substantial increase over where we are now, and I would suggest that the time is right for a whole lot of reasons. One, we do have a surplus of \$5.6 trillion and counting. A lot of that is committed to tax cuts and debt reduction, but that still leaves a rather substantial amount of money to be used for investments in our

future, and I can think of no better investment, nor one that would pay greater dividends, than an investment in science.

PT How do you maintain a balanced portfolio for federal science spending? Isn’t it easier to persuade legislators to support the National Institutes of Health (NIH) and the search for disease cures as opposed to something as complex and remote from everyday life as the Spallation Neutron Source?

BOEHLERT Everybody is thinking about their own life expectancy, so you have a lot more difficulty educating the public [about science not related to health]. The NIH is critically important and that’s a wise investment, but that should not be the only center of attention. I can understand why it is in a lot of quarters. Members [of Congress] aren’t focusing on whether or not we should revisit the Superconducting Super Collider [SSC] and questions like that. Those are things that are beyond the ability of most people to comprehend unless they sit down and study it, and I’m discovering I’m still learning a lot after 18 years on the committee.

There is a compelling need to invest in such basic things as K–12 science and math education and to place a greater emphasis on the science career opportunities for women and minorities. Those are easy to sell, and people understand them. But when we get into some of the other areas of science, if you talk to the average member of Congress who, you know, works 25 hours a day, 8 days a week, they immediately think of the space program because that’s highly visible and people can identify with it. But they don’t think so much about the need for instrumentation for universities or the national labs.

PT You’ve talked in the past weeks about how you want to make the science committee a significant force within Congress. How do you do that? Would you favor reestablishing the Office of Technology Assessment to raise the awareness of science in Congress?

BOEHLERT Well, this committee has come a long way in the last couple of years. In 1994, when we [Republicans] recaptured the majority for the first time in 40 years, there was talk in some quarters of cutting back on Capitol Hill. We eliminated something like 20 subcommittees and maybe even a couple of committees. And science was one of those that was

looked at to go. But thanks to [former Congressman] Bob Walker's tenaciousness, science was retained, and for the last six years it has gone along and done nicely. So there is no longer any talk or any thought that the science committee should be abolished.

What I'm determined to do is not only assure people that they've made the right decision to continue it, but I want people to look to the science committee as one of the leading forces working in concert with the educational workforce, for example, on K-12 science education. I want the White House, when they're talking about education, to think in terms of the science committee, not just the education committee. On energy and environmental policy, I think we have a large role to play, and I'm determined that our committee will do so. We haven't been thought of much in these areas. We will be.

PT *What's the committee's role in developing an energy policy?*

BOEHLERT I think it's sinful that this nation doesn't have a coherent energy policy, and we're determined to

contribute to that policy. But we're not going to deal with drilling in Alaska or things like that. We're going to deal with renewables, conservation, and energy efficiency. We're going to send a signal to one and all that we intend to be players.

PT *What role do you think nuclear power should play in a national energy policy?*

BOEHLERT I think, in many respects, [energy policy is] like a blank sheet of paper in which we've got to do something. We've got to determine what we're going to put on that sheet of paper, and I have not been unalterably opposed to nuclear energy. We're not going to rush pell-mell into it, but we're not going to summarily dismiss it.

PT *Physics is becoming increasingly dependent on big expensive machines that are operated cooperatively by several countries. What is your view of the increasingly international nature of physics?*

BOEHLERT Science is becoming increasingly international and that's what I argued when I supported the

LHC and was opposed to the SSC. The LHC is a pretty good model. We're contributing substantially to the LHC, it's working, and it's truly international. The old idea of international was the United States paid for it and everybody else used it. But these big science projects are very costly and it's in the best interest of all concerned to truly internationalize them.

PT *The national labs, particularly the weapons labs, have had a rough time in Congress during the past couple of years on a host of issues, including security and management practices. How do your colleagues view the labs?*

BOEHLERT Most members don't even think in terms of the national labs unless they have a national lab in their district, or have a special interest for some reason, or they happen to be on the Intelligence Committee and have some inside information about some of the activities involving Wen Ho Lee and others. I think the national labs have a very important role to play for the nation. What that role is going to be, and how we define it, is not really clear to me yet.

JIM DAWSON

Position Paper Ponders Planning for US High-Energy Physics

Until the Large Hadron Collider (LHC) at CERN, near Geneva, is completed in about 2006, the Tevatron at Fermilab, near Chicago, will be the highest-energy accelerator available to particle physicists. But what then? The High-Energy Physics Advisory Panel has recently published a "White Paper" on planning for particle physics in the US. HEPAP, currently chaired by Fred Gilman of Carnegie Mellon University, serves as an advisory body to both the Department of Energy (DOE) and NSF.

Updating the 1998 report of a HEPAP planning subpanel, the new

 A new HEPAP White Paper urges adequate utilization of existing facilities and timely planning for new ones.

White Paper (<http://hepserve.fnal.gov:8080/doe-hep/home.html>) offers a current assessment, in a worldwide context, of where things stand now and what needs to be done in the next few years. The document is intended to serve as input for this summer's Snowmass workshop (<http://www.snowmass2001.org>) on the future of high-energy physics, and for the 20-year plan that's being prepared by a new DOE/NSF panel headed by Barry Barish (Caltech) and Jonathan Bagger (Johns Hopkins University). The report of that long-range planning panel is expected next fall.

Since the appearance

THE NEW MAIN INJECTOR (foreground ring) at Fermilab should increase the luminosity of the Tevatron collider (background ring) by an order of magnitude for the run that's just beginning.

of the 1998 subpanel report, there have been several important accomplishments: PEP-II, the asymmetric B-factory at SLAC began running in 1999 and, by last fall, was already operating at its design luminosity. The Tevatron collider is just now getting under way again with greatly enhanced luminosity, after several years of shutdown to install its new "main injector" (see the photo) and a variety of other upgrades. At Cornell, the major upgrade of the CESR e^+e^- collider has also been completed. All these accomplishments, we are reminded, "were finished on schedule and on budget."

Adequate utilization

Although the White Paper cites good reasons to believe that these facilities "are guaranteed to produce frontier physics results," it expresses concern about funding for their use: "The shortfall of funds for operating the recently completed facilities will severely hamper their utilization." The White Paper regards adequate funding for their operation, and for the research groups striving to extract the physics, as "the highest priority need."

With regard to other large accelerators that will be needed, the White

